

August 18, 2003

TO: Internal File
THRU: Daron R. Haddock, Permit Supervisor
FROM: James D. Smith, Senior Reclamation Specialist
RE: 2003 First Quarter Water Monitoring, Energy West Mining Company, Deer Creek Mine, C/015/018-WQ03-1, Task # 1399

1. Were data submitted for all of the MRP required sites? YES [X] NO []
Identify sites not monitored and reason why, if known:

2. On what date does the MRP require a five-year resampling of baseline water data.
See Technical Directive 004 for baseline resampling requirements. Consider the five-year baseline resubmittal when responding to question one above. Indicate if the MRP does not have such a requirement.

Resampling Due Date

Renewal submittal due 10/07/00, renewal due 2/07/01. Baseline analyses were performed in 1996 and 2001 and will be repeated every 5 years, i.e., next baseline analyses will be in 2006.

3. Were all required parameters reported for each site? YES [X] NO []
Comments, including identity of monitoring site:

For all monitoring wells, depth (the required parameter) has been reported but water elevation has not been reported.

4. Were irregularities found in the data? YES [X] NO []

Comments, including identity of monitoring site:

DCWR1: lab pH (n = 49; not a required parameter) and depth (n = 52; this appears to be a data-entry error - parameters in the database appear to be a mix of meters and feet) were outside the two standard deviation range;

HCC01: TDS (n = 78) was outside the two standard deviation range;

HCC02: field pH: (n = 88) was outside the two standard deviation range;

NEWUA METER-2: Na (n = 16) and sulfate (n = 29) were outside the two standard deviation range;

NEWUA METER-3: field conductivity (n = 27), Ca (n = 17), Mg (n = 17), Na (n = 17), sulfate (n = 30), and TDS (n = 30) were outside the two standard deviation range;

Main North Main East: field water temperature (n = 38) was outside the two standard deviation range;

RCW4: field conductivity (n = 77), Ca (n = 24), sulfate (n = 44), and TDS (n = 44) were outside the two standard deviation range;

UPDES 23604-002 February: total Fe (n = 252) was outside the two standard deviation range.

5. Were DMR forms submitted for all required sites?

1st month, YES [X] NO []

2nd month, YES [X] NO []

3rd month, YES [X] NO []

Identify sites and months not monitored:

DMRs submitted in electronic format (Adobe). DMR parameters are not in the database.

6. Were all required DMR parameters reported? YES [X] NO []

Comments, including identity of monitoring site:

7. Were irregularities found in the DMR data? YES [X] NO []

Comments, including identity of monitoring site:

UPDES UT0023604-002 January and February: DMR avg. flow (n = 15) and DMR max flow (n = 15) were outside the two standard deviation range;

UPDES UT0023604-002 February: DMR daily-max total Fe (n = 15) and DMR 30-day average total Fe (n = 11) were outside the two standard deviation range;

UPDES UT0023604-002 January, February, and March: DMR daily-max TDS in mg/L (n = 15) was outside the two standard deviation range;

8. Based on your review, what further actions, if any, do you recommend?

The Permittee needs to always confirm that - for monitoring wells - water-depth and water-elevation values entered into the database are in feet rather than meters. Both water-depth and water-elevation need to be entered into the database.

DMR parameters need to be entered into the database.

Several values were outside the two standard deviation range. None of the values are extreme. Recommended action is to watch for trends.